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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,495	06/30/2003	Stefaan Jozef De Cnodder	Q76292	8654
	590 03/16/2007		EXAM	IINER
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CHOU, ALBERT T	
			ART UNIT	PAPER NUMBER
WASIIINGTON	, 50 20037		2616	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	THC	03/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/608,495	DE CNODDER ET AL.			
		Examiner	Art Unit			
		Albert T. Chou	2616			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>30 June 2003</u> .					
′—	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-14</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  Claim(s) is/are allowed.  Claim(s) <u>1-4,7-9 and 12-14</u> is/are rejected.  Claim(s) <u>5,6,10 and 11</u> is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers	•				
·	The specification is objected to by the Examine The drawing(s) filed on <u>30 June 2003</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction	☑ accepted or b) ☐ objected to drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
11)	The oath or declaration is objected to by the Ex	• • • • • • • • • • • • • • • • • • • •	• •			
Priority (	under 35 U.S.C. § 119					
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
	e of References Cited (PTO-892)	4)  Interview Summary Paper No(s)/Mail Da				
3) 🛛 Infor	te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal P				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7-9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over "A Method for MPLS LSP Fast-Reroute Using RSVP Detours" by Gan et al., IETF, Internet Draft, draft-gan-fast-reroute-00,txt, April 10, 2001 (hereinafter "Gan").

Regarding claim 1, Gan teaches a method to release, by means of a Path\_Tear Message, a Label Switched Path (LSP) established between linked routers of a telecommunication network [Sec. 1, Introduction; page 1 – page 2, lines 1-24],

said routers being linked in cascade according to a Main Path and being further linked in another order according to at least one Detour Path [Fig. 1; page 3, lines 1-19],

characterized in that said Path\_Tear Message indicating, to the router receiving said Path\_Tear Message, whether said Path\_Tear Message should be immediately forwarded towards a downstream-located router [page 10, lines 16-23].

Gan does not expressly teach whether said Path\_Tear Message includes a tag.

However, It would have been obvious to a person of ordinary skill in the art at the time of the invention to recognize that in RSVP-TE operation, a Path\_Tear message, by itself, is a signal, an indication, or a tag indicating that a path along a node receiving the Path\_Tear message is going down, and, therefore the receiving node should immediately forward the Path\_Tear message toward its downstream router for preparation of tearing down the path.

The motivation for using Path\_Tear message itself as a signal, an indication, or a tag would be to simplify the implementation of Path\_Tear message and to quickly enable a detour node, without checking extra indicators, to propagate to both main and detour LSP's before it tears down both the main and the detour LSP's.

Regarding claim 2, Gan teaches the release method characterized in that said Path\_Tear Message is received, in the receiving router, via a said Detour Path linking an upstream-located router to said receiving router [Fig. 1, Sec. 2 Operation Overview, page 2 – page 3, line 19, page 10, lines 16-23].

Regarding claims 3 and 8, Gan teaches the release method characterized in that said tag indicates through which of said Main Path or said Detour Path or both, starting from the receiving router, said Path\_Tear Message should be immediately forwarded towards said downstream-located router [Fig. 1, Sec. 2 Operation Overview, page 2 – page 3, line 19, page 10, lines 16-23].

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Regarding claims 4 and 9, Gan teaches the release method characterized in that, for said router receiving said Path\_Tear Message, said release method further comprises a step of releasing all the Label Switched Paths (LSP) arriving at this receiving router from upstream-located routers via said Main Path and via said Detour Path linking said upstream-located routers and said receiving router [Fig. 1, Sec. 2 Operation Overview, page 2 – page 3, line 19, page 10, lines 16-23].

Regarding claims 7 and 14, Gan teaches a telecommunication network with a plurality of routers interconnected via links through which Label Switched Paths (LSP) are established [Sec. 1, Introduction; page 1 – page 2, lines 1-24],

said routers being linked in cascade according to a Main Path and being further linked in another order according to at least one Detour Path [Fig. 1; page 3, lines 1-19].

and said routers being adapted to transmit a Path\_Tear Message towards downstream-located routers, said Path\_Tear Message indicating that a Label Switched Path (LSP) has to be released [page 10, lines 16-23],

characterized in that the router transmitting said Path\_Tear Message is adapted to indicate [page 10, lines 16-17], to the router receiving said Path\_Tear Message, whether said Path\_Tear Message should be immediately forwarded towards a downstream-located router [page 10, lines 19-23],

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and in that the receiving router is adapted to detect said tag in said received Path\_Tear Message, to release each Label Switched Path and to forward immediately said Path\_Tear Message towards said downstream-located router [page 10, lines 16-23].

Gan does not expressly teach whether said Path\_Tear Message includes a tag and immediately forwards said Path\_Tear Message according to said tag.

However, It would have been obvious to a person of ordinary skill in the art at the time of the invention to recognize that in RSVP-TE operation, a Path\_Tear message, by itself, is a signal, an indication, or a tag indicating that a path along a node receiving the Path\_Tear message is going down, and, therefore the receiving node should immediately forward the Path\_Tear message toward its downstream router for preparation of tearing down the path.

The motivation for using Path\_Tear message itself as a signal, an indication, or a tag would be to simplify the implementation of Path\_Tear message and to quickly enable a detour node, without checking extra indicators, to propagate to both main and detour LSP's before it tears down both the main and the detour LSP's.

Regarding claim 12, Gan teaches both said Main Path and at least one Detour Path arrive at said receiving router [Fig. 1; page 3, lines 1-19].

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Regarding claim 13, Gan teaches said telecommunication network is a Multi-Protocol Label Switching [MPLS] telecommunication network [Title: A Method for MPLS KSP Fast-Route Using RSVP Detours; page 1, line 1].

## Allowable Subject Matter

2. Claims 5, 6, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - US Patent Application Pub. No. 2002/0112072 A1 by Jain discloses "System And Method For Fast-Rerouting Of Data In A Data Communication Network"
  - US Patent Application Pub. No. 2003/0229807 A1 by Qiao et al. disclose
     "Segment Protection Scheme For A Network"

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Any inquiry concerning this communication or earlier communications from the 4. examiner should be directed to Albert T. Chou whose telephone number is 571-272-6045. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Albert T. Chou

March 12, 2007

CHI PHAM
SUPERVISORY PATENT EXAMINER

7/13/37